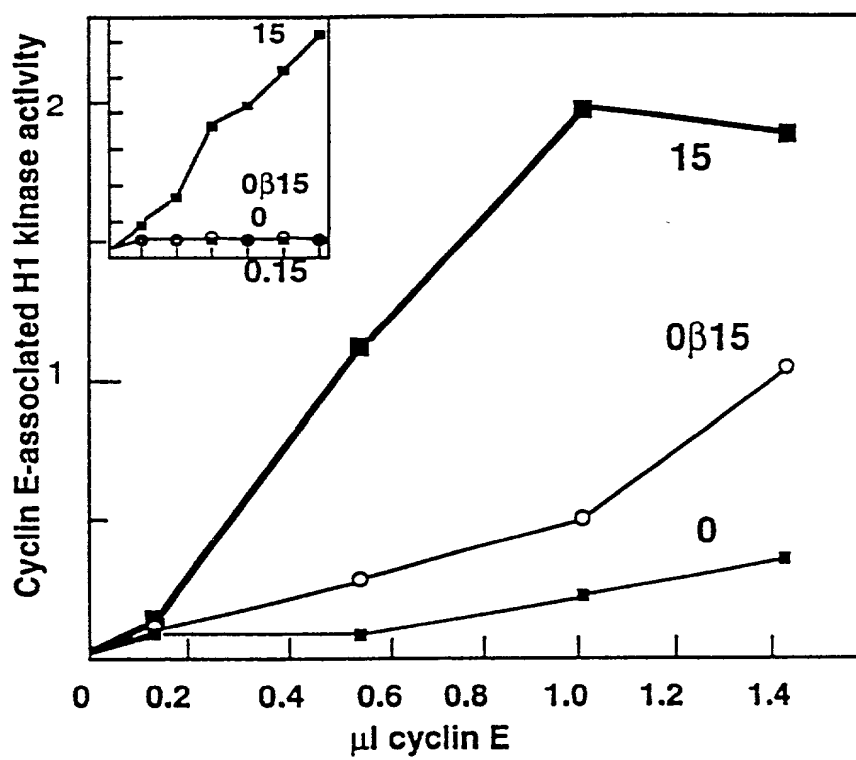


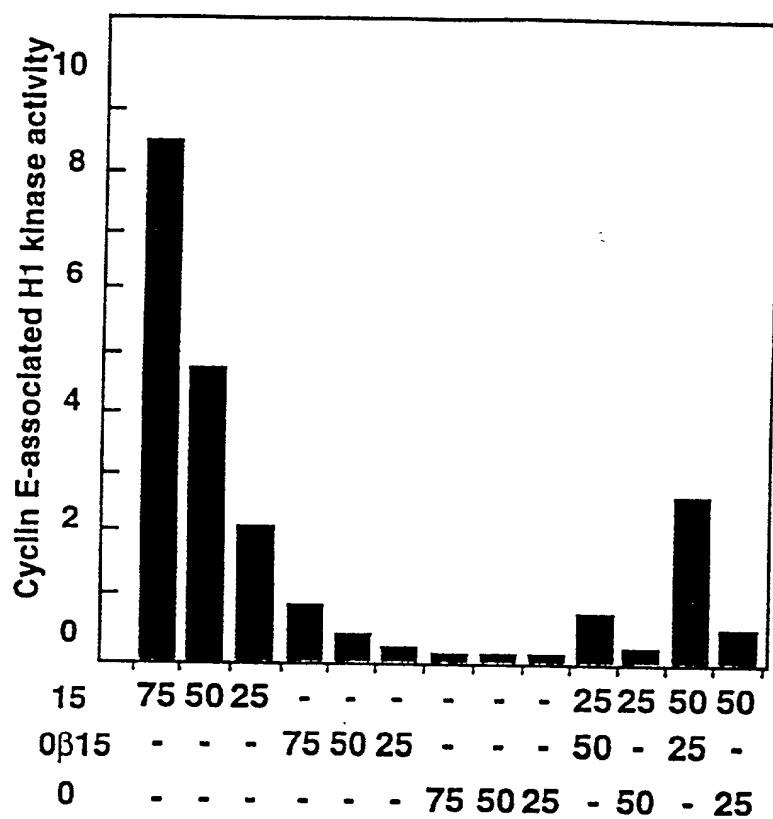
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FIGURE 1A



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FIGURE 1B



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FIGURE 2A

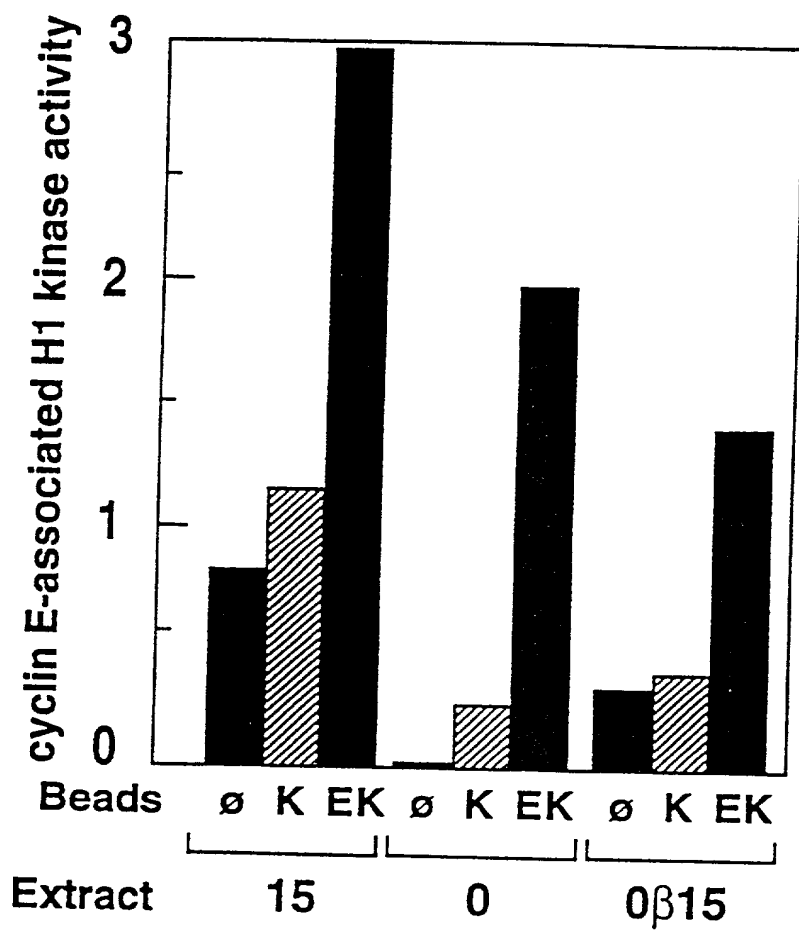
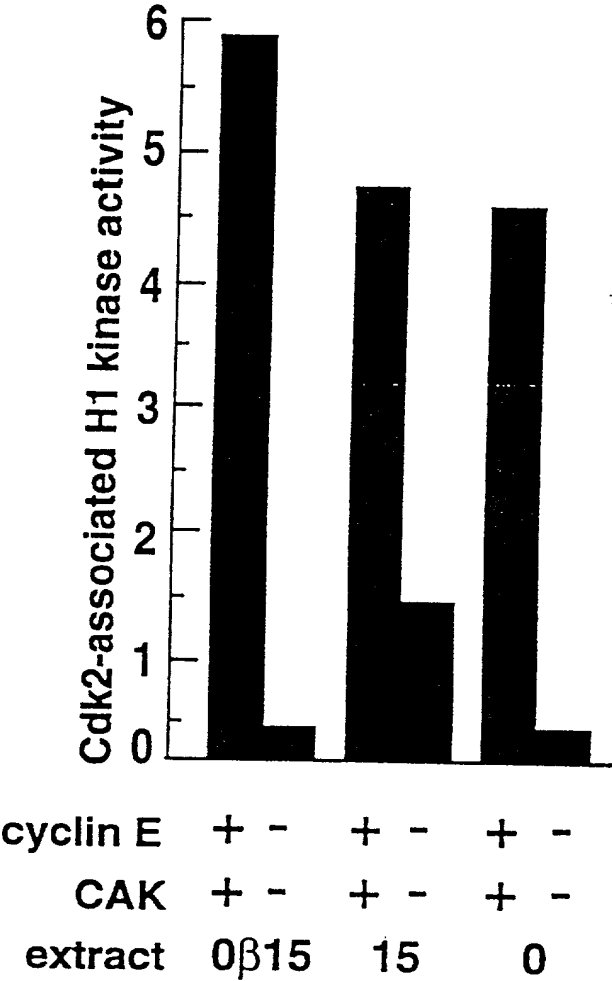
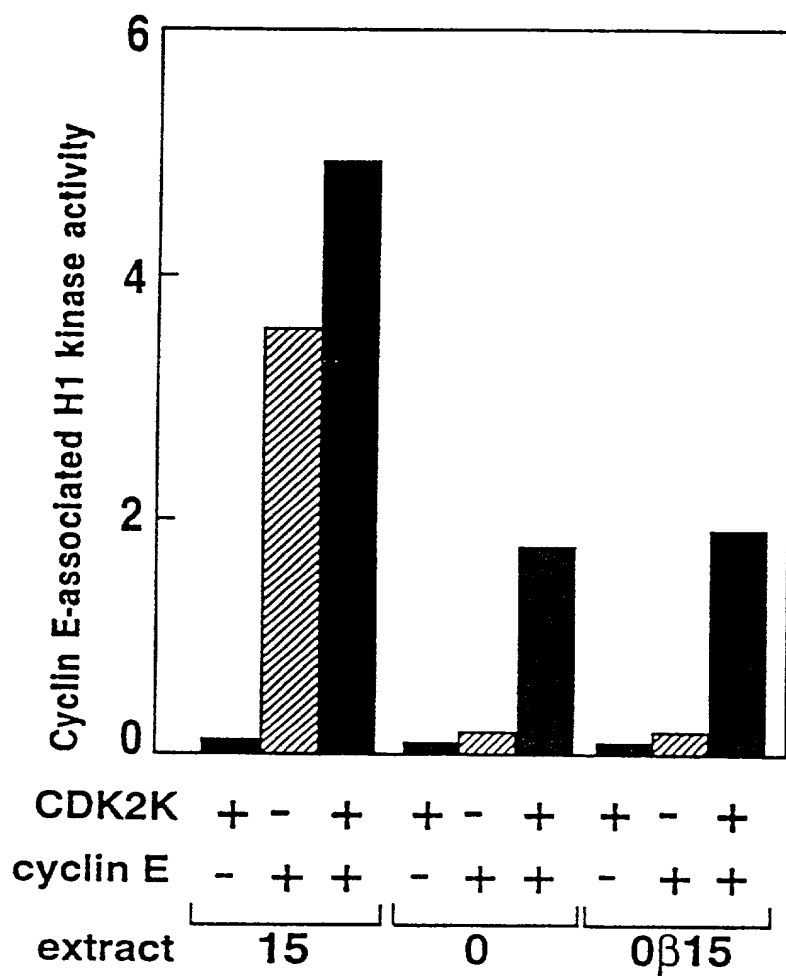


FIGURE 2B



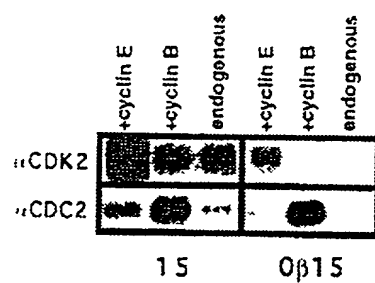
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FIGURE 2C



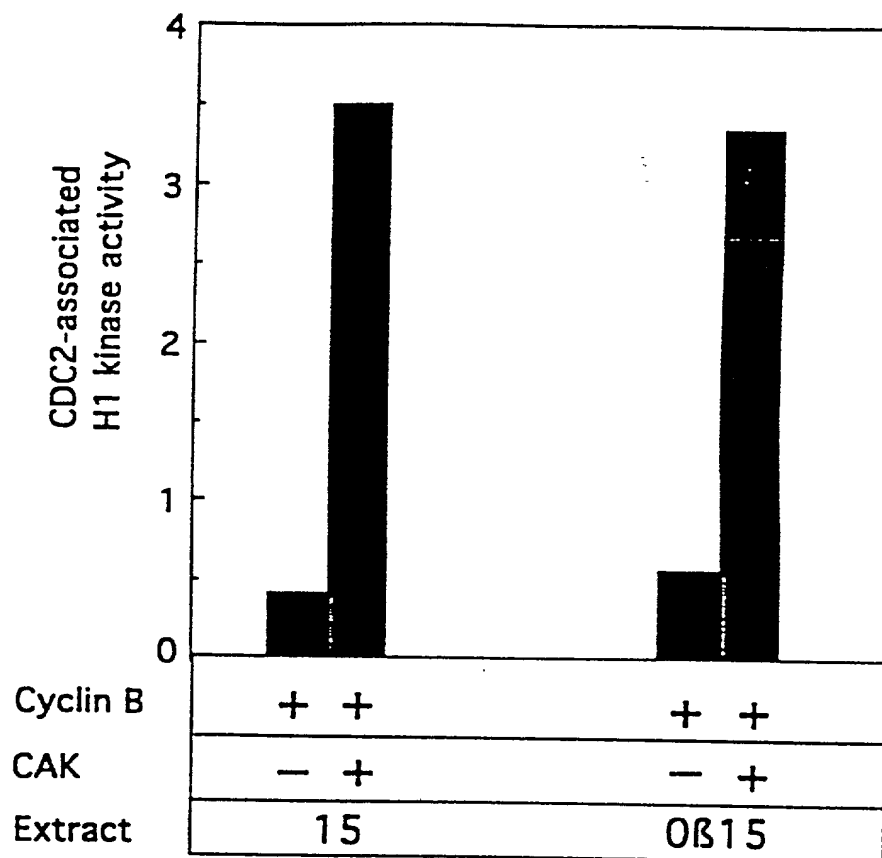
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FIGURE 3A



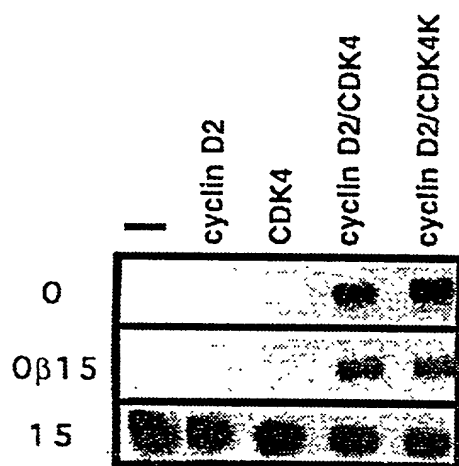
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FIGURE 3B



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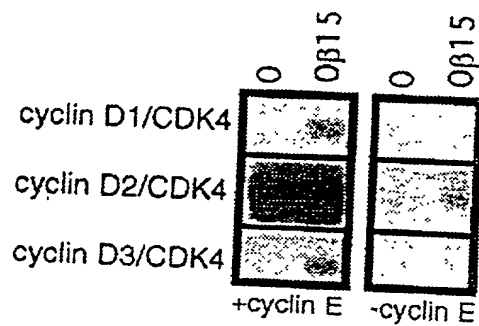
FIGURE 4A





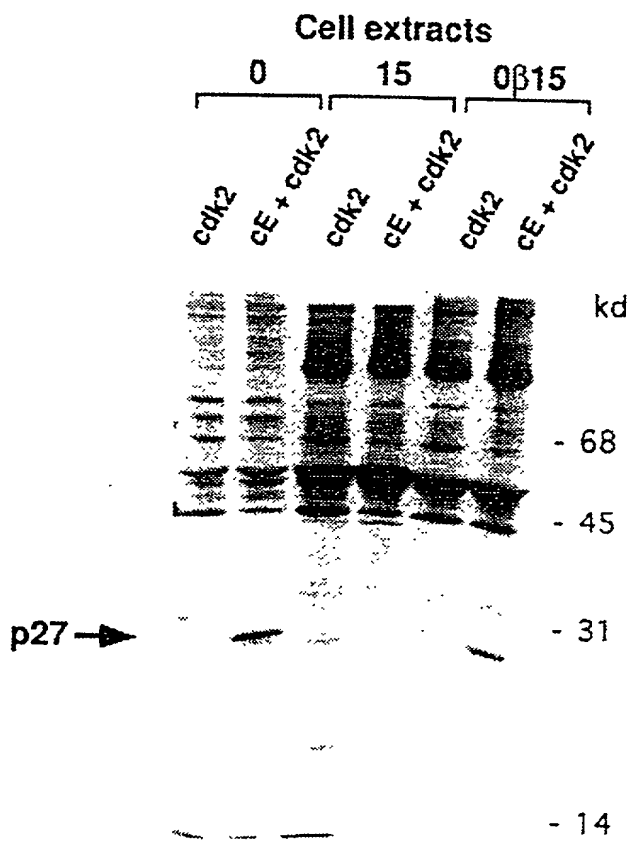
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FIGURE 4B



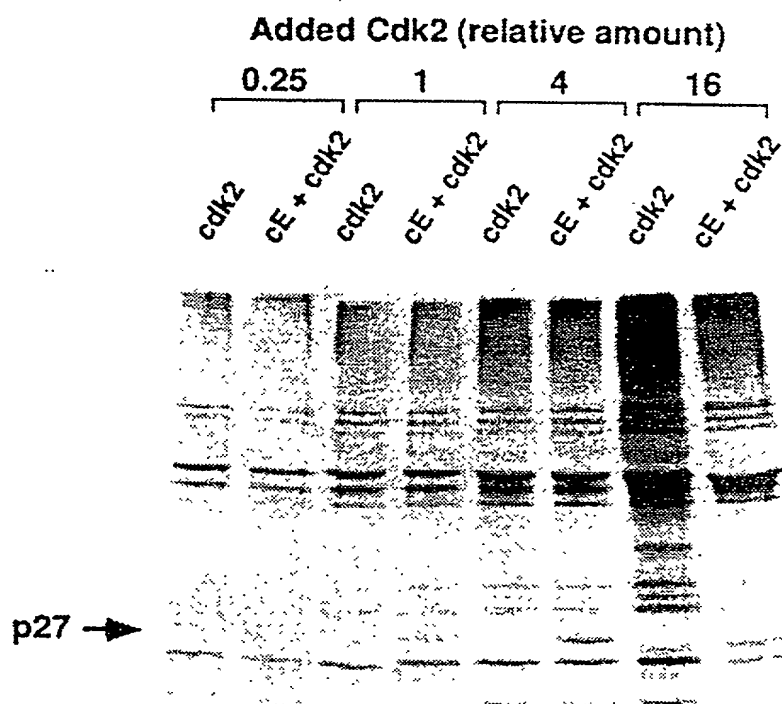
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FIGURE 5A



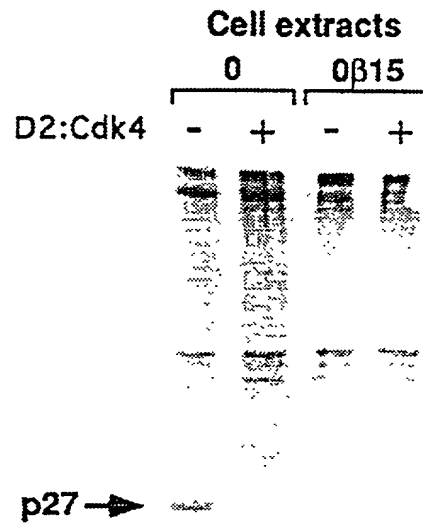
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FIGURE 5B



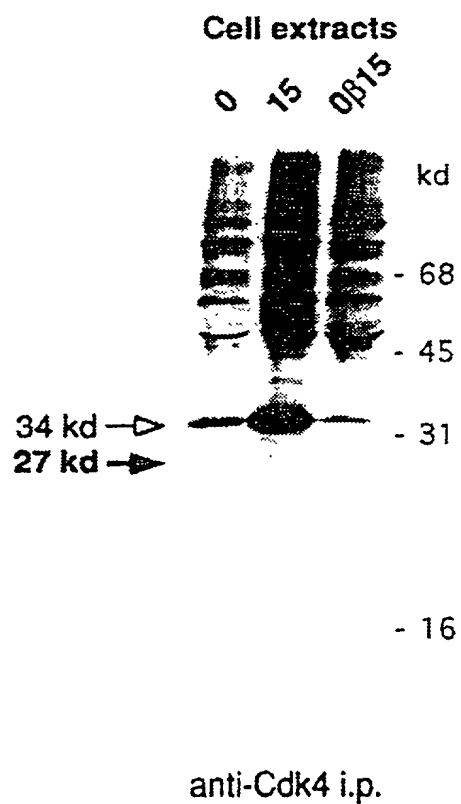
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FIGURE 5C



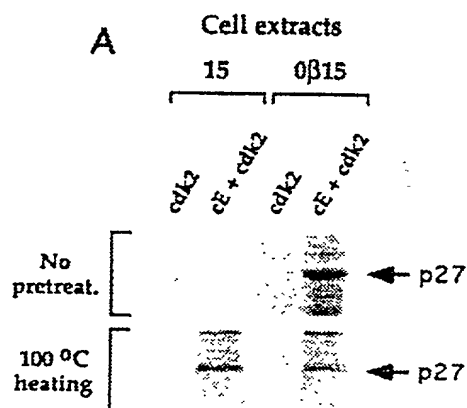
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FIGURE 5D



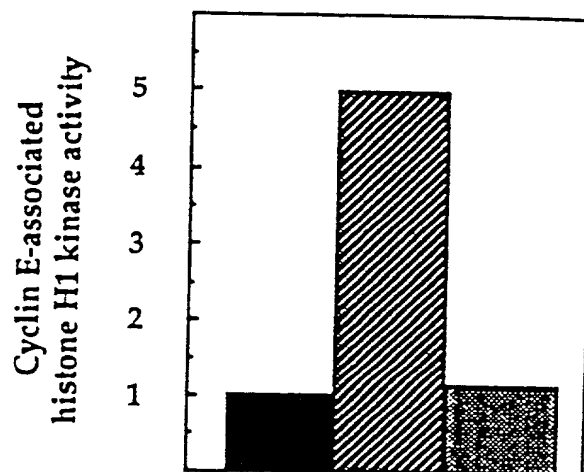
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FIGURE 6A



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FIGURE 6B



Additions:

|                   |   |   |   |
|-------------------|---|---|---|
| 100°C-Heated      | - | - | + |
| Exp. cell extract | - | + | + |
| Cyclin E          | - | + | + |

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FIGURE 6C

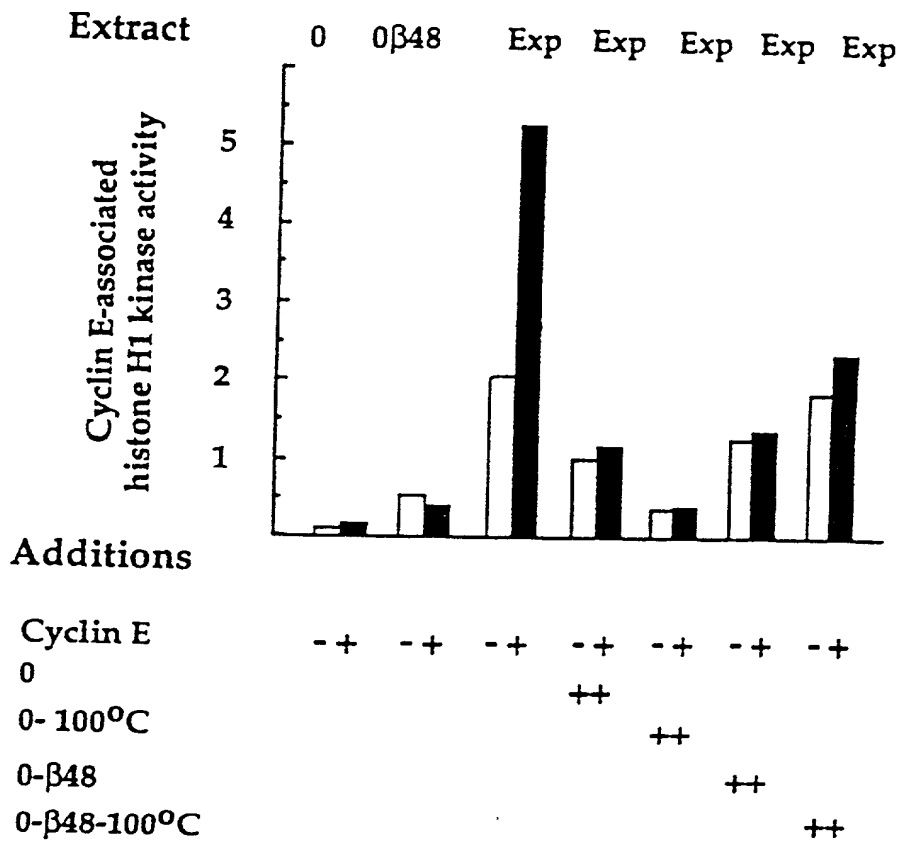
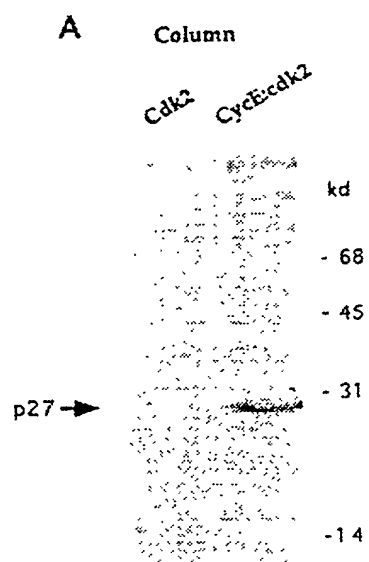


FIGURE 6C



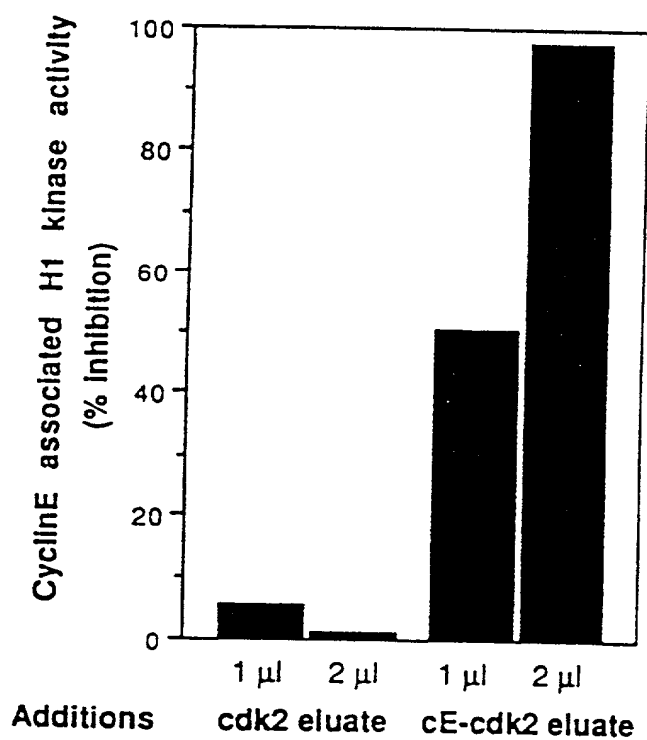
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FIGURE 7A



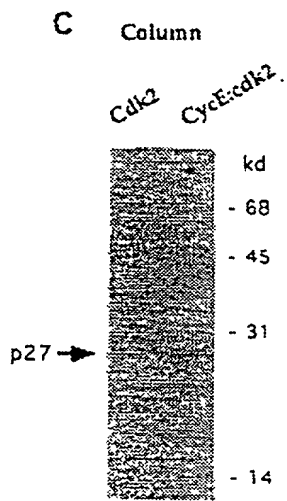
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FIGURE 7B



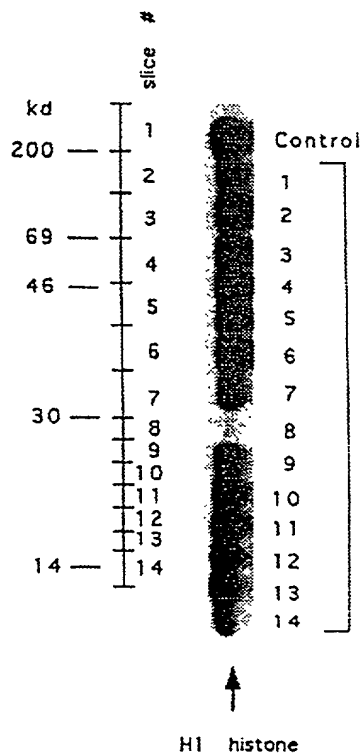
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FIGURE 7C



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FIGURE 7D



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FIGURE 8D

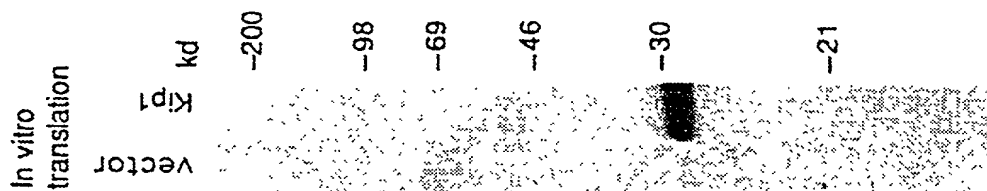


FIGURE 8C

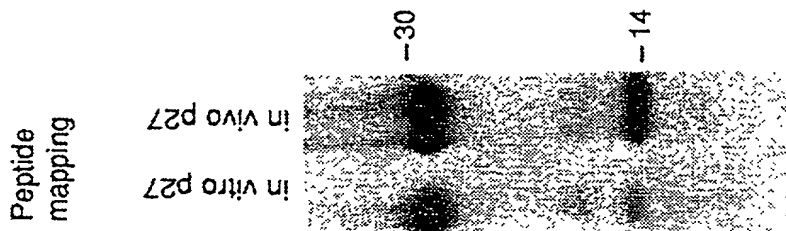


FIGURE 8B

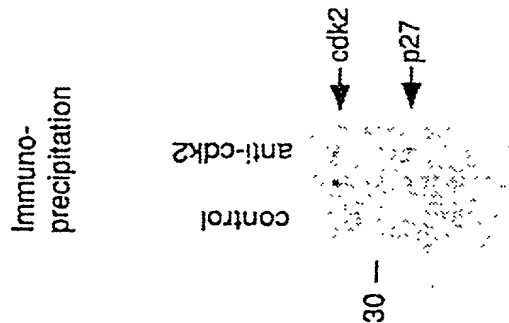
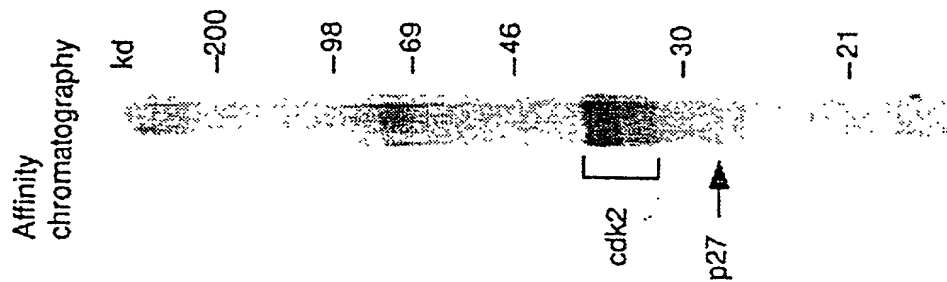


FIGURE 8A



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## FIGURE 9A

mk kip1 MSNVRVSNNGSPSLERMDARQAEYPKPSACRNLFGPVNHEELTRDLEKHRRF  
 m kip1 .....DH.....C.  
 h kip1 .....H.....D.....C.

mk kip1 DMEEASQRKWNFDFQNHKPLEGKYEWQEVKGSLPEFYRPPRPPKGACH  
 m kip1 .....R.....R.....S...  
 h kip1 .....

mk kip1 VPAQESQDVSGTRQAVPLMGSOANSEDTHLVDQKTDADNOAGLAEQCTG  
 m kip1 .L.....S.....I.....R.....MP.SS.....P.  
 h kip1 .....S.P.A..I.AP.....P...PS.S.T.....A.

mk kip1 IRKRPATDDSSPQNKRRNTEENVSDGSXXXXXXXXXXXXXXXXXXXX  
 m kip1 M.....AE...S.....PNAGTVEQTPKKPGLRR-QT  
 h kip1 .....T.....S.....R..

## FIGURE 9B

h kip1 MSNVRVSNNGSPSLERMDARQAEHPKPSACRNLFGPVNHEELTRDLEKHCR 31  
 h cip1 MSEPA GDVRQNPCGSKACRLFGPVISEQLSRDCDALMA 39

h kip1 DMEEASQRKWNFDFQNHKPLEGKYEWQEVKGSLPEFYRPPRPPKGACH 100  
 h cip1 GCIQEARERWNFDFVTETPLEGDFAWERVRGLGLKLYLPTGPRGRDEL 39

h kip1 VPAQESQDVSGSRRLPLIGAPANSEDTHLVDPKTDPSDSQTGLAEQCAG 131  
 h cip1 GGGRRPGTSPALLQGTAEEDHVDLSLCTLVPRSGEQAEGSFGGPGDSQG 139

h kip1 IRKRPATDDSSSTQ-NKRANRTEENVSDGSPNAGSVEQTPKKPGLRRRQT\* 155  
 h cip1 RKRRQISMTDFYHSKRRLIFSKRKP\* 164

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FIGURE 10A



HH1-  
Kip1, nM 0 0.25 0.5 1.25 2.5 5 10 20

FIGURE 10C



Rb-  
Kip1, nM 0 0.25 0.5 1.25 2.5 5 10 20

FIGURE 10B

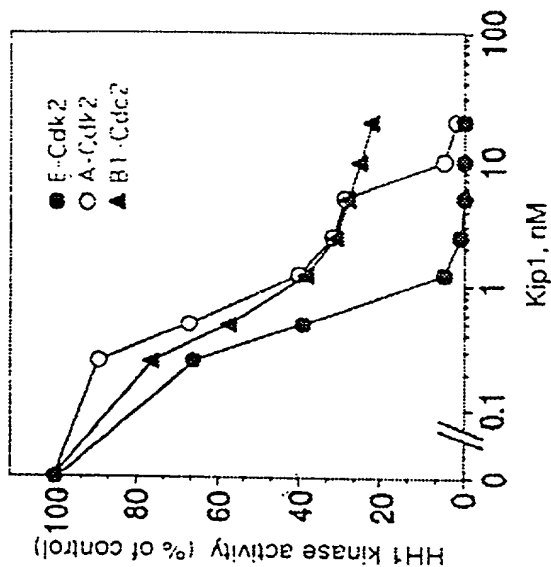


FIGURE 10D

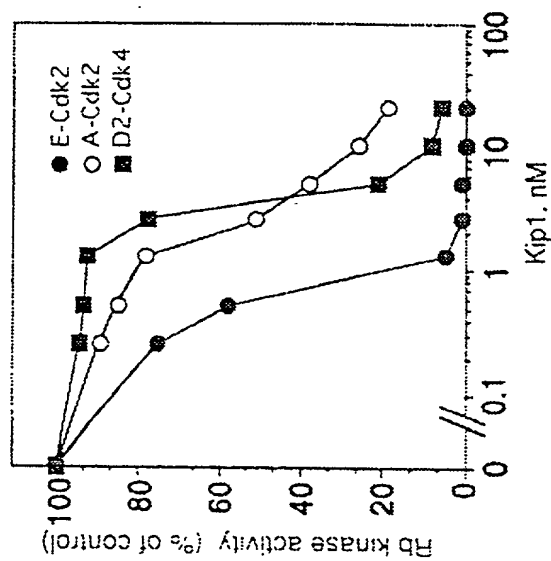
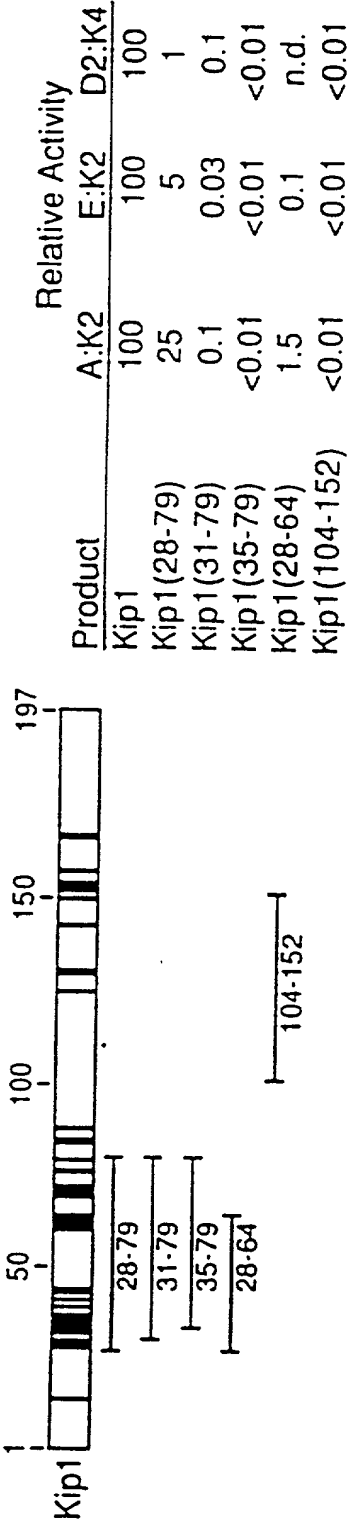


FIGURE 10E





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FIGURE 11A

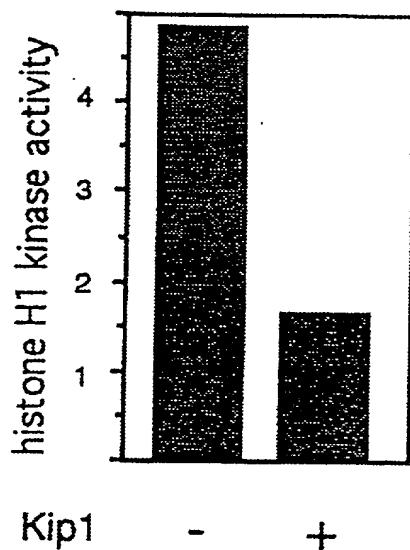
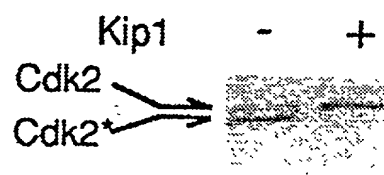


FIGURE 11B



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FIGURE 12A

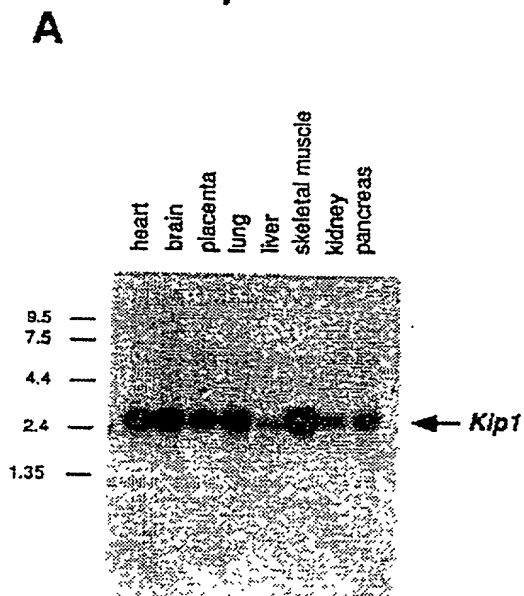
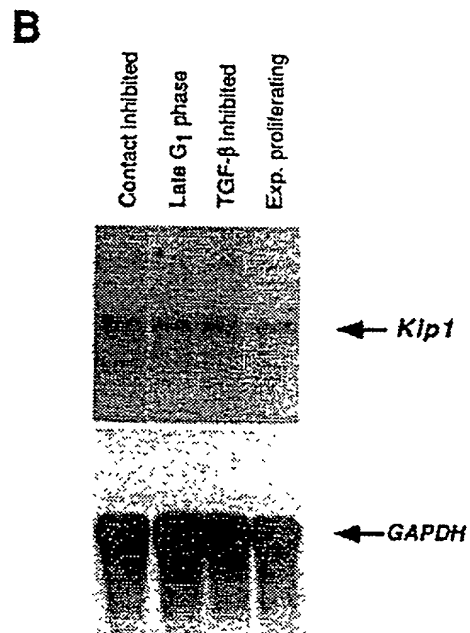


FIGURE 12B



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FIGURE 13A

|   |     |
|---|-----|
| ATG TCA AAC GTG CCG GTG TCT AAC GGG AGC CCG AGC CTG GAG CGG ATG     | 48  |
| Met Ser Asn Val Arg Val Ser Asn Gly Ser Pro Ser Leu Glu Arg Met     | 15  |
| 1   |     |
| GAC GCC AGA CAG GCG GAG TAC CCC AAG CCC TCC GCC TGC AGA AAC CTC     | 96  |
| Asp Ala Arg Gln Ala Glu Tyr Pro Lys Pro Ser Ala Cys Arg Asn Leu     | 30  |
| 20  |     |
| TTC GGC CCG GTC AAC CAC GAA GAG CTG ACC CCG GAC TTG GAG AAG CAC     | 144 |
| Phe Gly Pro Val Asn His Glu Glu Leu Thr Arg Asp Leu Glu Lys His     | 45  |
| 35  |     |
| CGC AGA GAC ATG GAA GAG GCA AGC CAG CGC AAG TGG AAT TTT GAT TTC     | 192 |
| Arg Arg Asp Met Glu Glu Ala Ser Gln Arg Lys Trp Asn Phe Asp Phe     | 60  |
| 50  |     |
| CAG AAT CAC AAG CCC CTG GAG GGC AAA TAC GAG TGG CAG GAG GTG GAG     | 240 |
| Gln Asn His Lys Lys Pro Leu Glu Gly Lys Tyr Glu Trp Gln Glu Val Glu | 80  |
| 65  |     |
| AAG GGC AGC TTG CCG GAG TTC TAC TAC AGA CCC CCG CGG CCA CCC AAA     | 288 |
| Lys Gly Ser Leu Pro Glu Phe Tyr Tyr Arg Pro Pro Arg Pro Pro Lys     | 95  |
| 85  |     |

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**FIGURE 13B**

|   |     |
|---|-----|
| GGC GCC TGC AAG GTG CCG GCG CAG GAG AGC CAG GAC GTC AGC GGG ACC | 336 |
| Gly Ala Cys Lys Val Pro Ala Gln Glu Ser Gln Asp Val Ser Gly Thr |     |
| 100 105 110   |     |
| CGG CAG GCC GTG CCT TTA ATG GGG TCT CAG GCA AAC TCA GAG GAC ACA | 384 |
| Arg Gln Ala Val Pro Leu Met Gly Ser Gln Ala Asn Ser Glu Asp Thr |     |
| 115 120 125   |     |
| CAC TTG GTA GAC CAA AAG ACT GAC ACG GCG GAC AAC GCT GGC TTA     | 432 |
| His Leu Val Asp Gln Lys Thr Asp Thr Ala Asp Asn Gln Ala Gly Leu |     |
| 130 135 140   |     |
| GGG GAG CAG TGC ACT GGG ATC AGG AAG CGA CCG GCC ACA GAC GAT TCC | 480 |
| Ala Glu Gln Cys Thr Gly Ile Arg Lys Arg Pro Ala Thr Asp Asp Ser |     |
| 145 150 155 160   |     |
| TCT CCT CAA AAC AAA AGA GCC AAC AGA ACA GAA GAA AAT GTC TCA GAC | 528 |
| Ser Pro Gln Asn Lys Arg Ala Asn Arg Thr Glu Glu Asn Val Ser Asp |     |
| 165 170 175   |     |
| GGT TCC   | 534 |
| Gly Ser   |     |

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FIGURE 14A

|   |     |
|---|-----|
| ATG TCA AAC GTG AGA GTG TCT AAC GGG AGC CCG AGC CTG GAG CGG ATG<br>Met Ser Asn Val Arg Val Ser Asn Gly Ser Pro Ser Leu Glu Arg Met<br>1 5 10 15   | 48  |
| GAC GCC AGA CAA GCG GAT CAC CCC AAG CCT TCC GCC TGC AGA AAT CTC<br>Asp Ala Arg Gln Ala Asp His Pro Lys Pro Ser Ala Cys Arg Asn Leu<br>20 25 30    | 96  |
| TTC GGC CCG GTC AAT CAT GAA GAA CTA ACC CCG GAC TTG GAG AAG CAC<br>Phe Gly Pro Val Asn His Glu Glu Leu Thr Arg Asp Leu Glu Lys His<br>35 40 45    | 144 |
| TGC CCG GAT ATG GAA GCG AGT CAG CGC AAG TGG AAT TTC GAC TTT<br>Cys Arg Asp Met Glu Glu Ala Ser Gln Arg Lys Trp Asn Phe Asp Phe<br>50 55 60        | 192 |
| CAG AAT CAT AAG CCC CTG GAG GCG AGA TAC GAA TGG CAG GAG GTG GAG<br>Gln Asn His Lys Pro Leu Glu Gly Arg Tyr Glu Trp Gln Glu Val Glu<br>65 70 75 80 | 240 |
| AGG GGC AGC TTG CCC GAG TTC TAC TAC AGG CCC CCG CGC CCC CCC AAG<br>Arg Gly Ser Leu Pro Glu Phe Tyr Tyr Arg Pro Pro Arg Pro Pro Lys<br>85 90 95    | 288 |
| AGC GCC TGC AAG GTG CTG GCG CAG GAG AGC CAG GAT GTC AGC GGG AGC<br>Ser Ala Cys Lys Val Leu Ala Gln Glu Ser Gln Asp Val Ser Gly Ser<br>100 105 110 | 336 |

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## FIGURE 14B

|   |     |
|---|-----|
| CGC CAG GCG GTG CCT TTA ATT GGG TCT CAG GCA AAC TCT GAG GAC CGG | 384 |
| Arg Gln Ala Val 115   |     |
| Pro Leu Ile 120   |     |
| Gly Ser Gln Ala Asn 125   |     |
| Ser Glu Asp Arg   |     |
| CAT TTG GTG GAC CAA ATG CCT GAC TCG TCA GAC AAT CAG GCT GGG TTA | 432 |
| His Leu Val Asp Gln Met 130                                     |     |
| Pro Asp Ser Ser Asp Asn Gln Ala Gly Leu 140                     |     |
| GCG GAG CAG TGT CCA GGG ATG AGG AAG CGA CCT GCT GCA GAA GAT TCT | 480 |
| Ala Glu Gln Cys Pro 145   |     |
| Gly Met Arg Lys Arg 150   |     |
| Pro Ala Ala Glu Asp Ser 155                                     |     |
| TCT TCG CAA AAC AAA AGG GCC AAC AGA ACA GAA AAT GTT TCA GAC     | 528 |
| Ser Ser Gln Asn Lys 160   |     |
| Arg Ala Asn Arg Thr Glu Glu Asn Val Ser Asp 170                 |     |
| GGT TCC CCG AAC GCT GGC ACT GTG GAG CAG ACG CCC AAG AAG CCC GGC | 576 |
| Gly Ser Pro Asn Ala 180   |     |
| Gly Val Glu Gln Thr Pro Lys Lys Pro Gly 185                     |     |
| CTT CGA CCG CAG ACG TA  | 594 |
| Leu Arg Arg Gln Thr 195   |     |

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## FIGURE 15A

|   |     |
|---|-----|
| ATG TCA AAC GTG CGA GTG TCT AAC GGG AGC CCT AGC CTG GAG CGG ATG | 48  |
| Met Ser Asn Val Arg Val Ser Asn Gly Ser Pro Ser Leu Glu Arg Met | 15  |
| 1   |     |
| GAC GCC AGG CAG GCG GAG CAC CCC AAG CCC TCG GCC TGC AGG AAC CTC | 96  |
| Asp Ala Arg Gln Ala Glu His Pro Lys Pro Ser Ala Cys Arg Asn Leu | 30  |
| 20  |     |
| TTC GGC CCG GTG GAC CAC GAA GAG TTA ACC CGG GAC TTG GAG AAG CAC | 144 |
| Phe Gly Pro Val Asp His Glu Glu Leu Thr Arg Asp Leu Glu Lys His | 45  |
| 35  |     |
| TGC AGA GAC ATG GAA GAG GCG AGC CAG CGC AAG TGG AAT TTC GAT TTT | 192 |
| Cys Arg Asp Met Glu Glu Ala Ser Gln Arg Lys Trp Asn Phe Asp Phe | 60  |
| 50  |     |
| CAG AAT CAC AAA CCC CTA GAG GGC AAG TAC GAG TGG CAA GAG GTG GAG | 240 |
| Gln Asn His Lys Pro Leu Glu Gly Lys Tyr Glu Trp Gln Glu Val Glu | 80  |
| 65  |     |
| AAG GGC AGC TTG CCC GAG TTC TAC TAC TAC TAC TAC TAC TAC TAC TAC | 288 |
| Lys Gly Ser Leu Pro Glu Phe Tyr Tyr Tyr Tyr Tyr Tyr Tyr Tyr Tyr | 90  |
| 85  |     |
| GGT GCC TGC AAG GTG CCG GCG CAG GAG AGC CAG GAT GTC AGC GGG AGC | 336 |
| Gly Ala Cys Lys Val Pro Ala Gln Glu Ser Gln Asp Val Ser Gly Ser | 110 |
| 100   |     |

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## FIGURE 15B

|   |     |
|---|-----|
| CGC CCG GCG GCG CCT TTA ATT GGG GCT CCG GCT AAC TCT GAG GAC ACG<br>Arg Pro Ala Ala Pro Leu Ile Gly Ala Pro Ala Asn Ser Glu Asp Thr<br>115 120 125     | 384 |
| CAT TTG GTG GAC CCA AAG ACT GAT CCG TCG GAC AGC CAG ACG GGG TTA<br>His Leu Val Asp Pro Lys Thr Asp Pro Ser Asp Ser Gln Thr Gly Leu<br>130 135 140     | 432 |
| GCG GAG CAA TGC GCA GGA ATA AGG AAG CGA CCT GCA ACC GAC GAT TCT<br>Ala Glu Gln Cys Ala Gly Ile Arg Lys Arg Pro Ala Thr Asp Asp Ser<br>145 150 155 160 | 480 |
| TCT ACT CAA AAC AAA AGA GCC AAC AGA ACA GAA GAA AAT GTT TCA GAC<br>Ser Thr Gln Asn Lys Arg Ala Asn Arg Thr Glu Glu Asn Val Ser Asp<br>165 170 175     | 528 |
| GGT TCC CCA AAT GCC GGT TCT GTG GAG CAG ACG CCC AAG AAG CCT GGC<br>Gly Ser Pro Asn Ala Gly Ser Val Glu Gln Thr Pro Lys Lys Pro Gly<br>180 185 190     | 576 |
| CTC AGA AGA CGT CAA ACG TA<br>Leu Arg Arg Arg Gln Thr<br>195  | 597 |

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